Inorganic Data Review Narrative

Case# 40200	**Site: RIVERSIDE AVE.**	**Soil: 0**
SDG# MB0002, MB0025, MB40T6	**Lab: BONNER ANALYTICAL TESTING**	**Water: 2**
Sampling Team: TTEMI	**Reviewer: R. RECTO**	**Other: 21**

A.2.1 Data Validation Flags:

The following flags may have been applied in red by the data validator and must be considered by the data user.

J - This flag indicates the result qualified as estimated

R and Red-Line - A red-line drawn through a sample result indicates unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

U - This data validation qualifier is applied to sample results ≥ MDL when associated blank is contaminated

Fully Usable Data - The results that do not carry "J" or "red-line" are fully usable.

A.2.2 Laboratory Qualifiers:

The CLP laboratory applies a contractual qualifier on all Form I'S and the QC Form when a QC analysis is outside the control limits. These qualifiers are not applied on the Lotus or XLS spreadsheets. These qualifiers and their meanings are as follows:

N: This qualifier indicates the lack of accuracy in the reported result, and is applied when matrix spiked sample recovery is outside the control limits.

E: This qualifier indicates the presence of interference, and is applied when the ICP serial dilution is outside the control limits.

***: This qualifier indicates the lack of precision, and is applied on Form I'S and Form VI when the Lab Duplicate analysis is outside the control limits.**

U: This is a concentration qualifier that laboratory applies to a non-detected result which is essentially less than the Method Detection Limit (MDL). A non-detected result of an analyte is indicated by the Contract Required Quantitation Limit (CRQL) of that analyte suffixed with "U".

J: This is also a concentration qualifier that laboratory applies to a positive result below the CRQL.

NOTE: The laboratory qualifiers are crossed out and replaced with the appropriate data validation qualifiers (J, R or U) by the data validator.

242361

A.2.3.1 Data Case Description:

This case consists of twenty three (23) samples collected at the Riverside Avenue site on 6/8/10 and 6/9/10 for Modified TCLP (21 samples), and for TAL Metals analysis + Hg + CN (2 samples) according to the USEPA CLP SOW No. ILM05.4. Matrix spike, laboratory duplicate and serial dilution analyses were performed on samples MB0002, MB0035, and MB40T7.

As per EPA Technical Direction Form (TDF) only the following criteria were reviewed by the data validator, where applicable: Preservation, Holding Time, CRQL Standard, Matrix Spike (soil matrix), Interference Check Sample, Laboratory Duplicate, ICP Serial Dilution, and Field Blank. The qualifiers applied on Form Is and CADRE EXCEL spreadsheets are based on ESAT data review of the above mentioned criteria. For all other criteria see the CADRE Reports.

A.2.3.2 CSF Audit: No problems.

A.2.3.3 Technical Review:

SDG MB0002 (11 TCLP Extracts for TAL METALS ICP-AES + Hg)

ICB/CCB

The Calibration Blanks values were ≥MDL but ≤CRQL for Ba and Hg. (Only analytes that required qualifications were mentioned.) The following associated positive results ≤CRQL were raised to the CRQL and qualified "U".

"U" -> Ba -> MB0007, MB0008, MB0017, MB0018, MB0019, MB0020, MB0021, MB0022, MB0023, MB0024

-> Hg -> MB0002, MB0007, MB0024

PREPARATION BLANK

The Preparation Blank values were ≥MDL but ≤CRQL for As, Ba, Cd, Cr, Pb, and Ag. (Only analytes that required qualifications were mentioned.) The following As, Cd, Cr, Pb, and Ag positive results ≤CRQL were raised to the CRQL and qualified "U". The Ba results were previously qualified due to ICB/CCB criteria; no action was taken.

"U" -> As -> MB0008, MB0017, MB0018, MB0020, MB0021, MB0022, MB0023, MB0024

-> Cd -> MB0002, MB0007, MB0008, MB0017, MB0018, MB0019, MB0020, MB0021 MB0022, MB0024

-> Cr -> MB0002, MB0007, MB0008, MB0017, MB0018, MB0019, MB0020, MB0021,

MB0022, MB0023, MB0024

"U" -> Pb -> MB0002, MB0008, MB0023, MB0024

-> Ag -> MB0002, MB0007, MB0008, MB0017, MB0018, MB0019, MB0020, MB0021, MB0022, MB0023, MB0024

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% for As (%R = 129). All associated sample results with concentration ≤ 4X Spike Amount Added whose percent recoveries are between 126 – 150 % have been considered estimated and qualified "J".

"J" -> As -> MB0002, MB0007, MB0008, MB0017, MB0018, MB0020, MB0021, MB0022, MB0023, MB0024

ICP SERIAL DILUTION

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 50 X MDL for Ba. All associated detects have been considered estimated and flagged "J".

"J" -> Ba -> MB0002, MB0007, MB0008, MB0017, MB0018, MB0019, MB0020, MB0021, MB0022, MB0023, MB0024

SDG MB0025 (10 TCLP Extracts for TAL METALS ICP-AES + Hg)

ICB/CCB

The Calibration Blanks values were ≥MDL but ≤CRQL for Ba and Hg. (Only analytes that required qualifications were mentioned.) The following associated positive results ≤CRQL were raised to the CRQL and qualified "U".

"U" -> Ba -> MB0025, MB0029, MB0030, MB0034, MB0035, MB0037, MB0040, MB0041, MB0044, MB0045

-> Hg -> MB0034

PREPARATION BLANK

The Preparation Blank values were ≥MDL but ≤CRQL for Ba, Cr, and Pb. (Only analytes that required qualifications were mentioned.) The following Cr and Pb positive results ≤CRQL were raised to the CRQL and qualified "U". The Ba results were previously qualified due to ICB/CCB criteria; no action was taken.

"U" -> Cr -> MB0034, MB0035, MB0040, MB0045

-> Pb -> MB0025, MB0029, MB0040, MB0044, MB0045

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% for As, Pb, Se, and Ag. Since the Matrix Spike sample was diluted 50X which consequently had diluted the Spike Additions to below CRQL, all associated sample results were considered estimated and qualified "J".

"J" -> As -> MB0025, MB0029, MB0030, MB0034, MB0035, MB0037, MB0040, MB0041, MB0044, MB0045

"J" -> Pb -> MB0025, MB0029, MB0030, MB0034, MB0035, MB0037, MB0040, MB0044, MB0045,

"J" -> Se -> MB0025, MB0029, MB0030, MB0034, MB0035, MB0037, MB0040, MB0041, MB0044, MB0045

"J" -> Ag -> MB0025, MB0029, MB0030, MB0034, MB0035, MB0037, MB0040, MB0041, MB0044, MB0045

SDG MB40T6 (2 AQUEOUS for TAL METALS ICP-AES + Hg + CN)

ICB/CCB

The Calibration Blanks values were ≥MDL but ≤CRQL for Cd, Hg, and CN. (Only analytes that required qualifications were mentioned.) The following associated positive results ≤CRQL were raised to the CRQL and qualified "U".

"U" -> Cd -> MB40T6, MB40T7

-> Hg -> MB40T7

-> CN -> MB40T7

PREPARATION BLANK

The Preparation Blank value was ≥MDL but ≤CRQL for CN. (Only analyte that required qualification was mentioned.) The CN result was previously qualified due to ICB/CCB criteria, no action was taken.

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% for Cu (R = 51%), Pb (R = 51%), and CN (R = 52%). All associated sample results with concentration ≤ 4X Spike Amount Added whose percent recoveries are between 10 – 74 % have been considered estimated and qualified “J”.

“J” -> Cu -> MB40T6, MB40T7

-> Pb -> MB40T6, MB40T7

-> CN -> MB40T6, MB40T7

LABORATORY DUPLICATE

The RPD between sample and duplicate results was > 20% but < 100% for Zn when sample and duplicate results were both greater than 5X CRQL. All associated sample results ≥ CRQL have been considered estimated and qualified “J”.

The absolute difference between sample and duplicate results was > CRQL for Ba and was > 2XCRQL for Cu when sample and/or duplicate results were < 5XCRQL. All associated sample results for Ba ≤ 5X CRQL have been considered estimated and qualified “J”. All associated sample results for Cu ≤ 5XCRQL were considered rejected and qualified “R”.

"J"-> Zn -> MB40T6, MB40T7

"J"-> Ba -> MB40T6, MB40T7

"R"-> Cu -> MB40T6

A.2.3.4 Contract-Problem/Non-Compliance:

SDG MB0025:

1). The digested TCLP Extracts were over diluted at 50X for ICP-AES analysis which affected some selenium results to be reported NON-Detects at a higher CRQL (1750 U) than the aqueous TCLP regulatory level at 1000 ppb (or 1 ppm).

2). Since the Matrix Spike sample (MB0035S) was also diluted 50X, the resulting Spike Added (SA x 1/50) yield results at less than the CRQL which made the % MS Recovery criteria (computation) to be Non- Applicable (NA). Hence, those outside the control limits of 75-125% such as As, Pb, Se, and Ag were summarily qualified “J” for all associated samples.

3). For ICP values, all samples with NON-Detected ("U") results in FORM I's were not multiplied by a factor of 50.

4). For Hg values, samples MB0040 and MB0045 with NON-Detected ("U") results in FORM I's were not multiplied by a factor of 100.

SDG MB40T6:

1). The Hg value for sample MB40T6, the NON-Detected ("U") result in FORM I was not multiplied by a factor of 2.

HWSS Reviewer: _____ Date: _____
Signature

Contractor Reviewer: _____ Date: _____
Signature

Verified by: _____ Date: _____
Signature

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0002

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-01

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	14.9		~~N~~ J	P
7440-39-3	Barium	229		~~E~~ J	P
7440-43-9	Cadmium	5 ~~0.22~~	~~J~~ U		P
7440-47-3	Chromium	10 ~~1.4~~	~~J~~ U		P
7439-92-1	Lead	10 ~~5.6~~	~~J~~ U		P
7439-97-6	Mercury	~~0.13~~	~~J~~		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	10 ~~0.39~~	~~J~~ U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0007

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-02

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

	CAS NO.	Analyte	Concentration	C	Q	M
	7440-38-2	Arsenic	17.0		~~N~~ J	P
	7440-39-3	Barium	200 ~~22.0~~	~~J~~ U	~~E~~ J	P
	7440-43-9	Cadmium	5 ~~0.19~~	~~J~~ U		P
	7440-47-3	Chromium	10 ~~2.3~~	~~J~~ U		P
	7439-92-1	Lead	15.3			P
*	7439-97-6	Mercury	20 ~~7.5~~	~~J~~ U	D	CV
	7782-49-2	Selenium	35.0	U	~~N~~	P
	7440-22-4	Silver	10 ~~3.0~~	~~J~~ U		P

* diluted at 100X for Hg

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0008

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-03

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10 4.6	J U	N J	P
7440-39-3	Barium	200 33.4	J U	E J	P
7440-43-9	Cadmium	5 0.44	J U		P
7440-47-3	Chromium	10 0.87	J U		P
7439-92-1	Lead	10 9.1	J U		P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	N	P
7440-22-4	Silver	10 0.59	J U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0017

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-04

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	~~3.2~~ 10	~~J~~ U	~~N~~ J	P
7440-39-3	Barium	~~54.3~~ 200	~~J~~ U	~~E~~ J	P
7440-43-9	Cadmium	~~0.28~~ 5	~~J~~ U		P
7440-47-3	Chromium	~~1.7~~ 10	~~J~~ U		P
7439-92-1	Lead	10.4			P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	~~1.4~~ 10	~~J~~ U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0018

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-05

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	~~2.4~~ 10	~~J~~ U	~~N~~ J	P
7440-39-3	Barium	~~34.5~~ 200	~~J~~ U	~~E~~ J	P
7440-43-9	Cadmium	~~0.72~~ 5	~~J~~ U		P
7440-47-3	Chromium	~~0.88~~ 10	~~J~~ U		P
7439-92-1	Lead	28.9			P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	~~1.6~~ 10	~~J~~ U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0019

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-06

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U	~~N~~	P
7440-39-3	Barium	200 ~~7.0~~	~~J~~ U	~~E~~ J	P
7440-43-9	Cadmium	5 ~~1.9~~	~~J~~ U		P
7440-47-3	Chromium	10 ~~0.66~~	~~J~~ U		P
7439-92-1	Lead	44.7			P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	10 ~~1.7~~	~~J~~ U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0020

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-07

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10 3.3	J U	~~N~~ J	P
7440-39-3	Barium	200 45.8	J U	~~E~~ J	P
7440-43-9	Cadmium	5 0.59	J U		P
7440-47-3	Chromium	10 0.89	J U		P
7439-92-1	Lead	32.6			P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	10 1.8	J U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0021

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-08

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	~~10~~ 5.3	~~J~~ U	~~N~~ J	P
7440-39-3	Barium	~~200~~ 39.6	~~J~~ U	~~E~~ J	P
7440-43-9	Cadmium	~~5~~ 0.49	~~J~~ U		P
7440-47-3	Chromium	~~10~~ 0.95	~~J~~ U		P
7439-92-1	Lead	25.1			P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	~~10~~ 2.0	~~J~~ U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0022

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-09

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10 5.5	J U	~~N~~ J	P
7440-39-3	Barium	200 38.8	J U	~~E~~ J	P
7440-43-9	Cadmium	5 0.34	J U		P
7440-47-3	Chromium	10 0.79	J U		P
7439-92-1	Lead	47.1			P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	N	P
7440-22-4	Silver	10 1.6	J U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0023

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-10

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10 ~~2.3~~	~~J~~ U	~~N~~ J	P
7440-39-3	Barium	200 ~~32.1~~	~~J~~ U	~~E~~ J	P
7440-43-9	Cadmium	5.0	U		P
7440-47-3	Chromium	10 1.1	~~J~~ U		P
7439-92-1	Lead	10 ~~4.7~~	~~J~~ U		P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	10 0.51	~~J~~ U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0024

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0002

Matrix: (Soil/Water) WATER Lab Sample ID: 1006285-11

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10 ~~2.6~~	~~J~~ U	~~N~~ J	P
7440-39-3	Barium	200 ~~31.1~~	~~J~~ U	~~E~~ J	P
7440-43-9	Cadmium	5 ~~0.10~~	~~J~~ U		P
7440-47-3	Chromium	10 ~~0.87~~	~~J~~ U		P
7439-92-1	Lead	10 ~~3.9~~	~~J~~ U		P
7439-97-6	Mercury	0.20 ~~0.062~~	~~J~~ U		CV
7782-49-2	Selenium	35.0	U	~~N~~	P
7440-22-4	Silver	10 ~~1.2~~	~~J~~ U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0025

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-01

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	D ~~N~~ J	P
7440-39-3	Barium	10,000 ~~17.8~~	~~J~~ U	D	P
7440-43-9	Cadmium	250 ~~5.0~~	U	D	P
7440-47-3	Chromium	500 ~~10.0~~	U	D	P
7439-92-1	Lead	500 ~~98.0~~	~~J~~ U	D ~~N~~ J	P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	1750 ~~35.0~~	U	D ~~N~~ J	P
7440-22-4	Silver	500 ~~10.0~~	U	D ~~N~~ J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0029

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-02

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 10.0	U	D N J	P
7440-39-3	Barium	10,000 13.7	J U	D	P
7440-43-9	Cadmium	250 5.0	U	D	P
7440-47-3	Chromium	500 10.0	U	D	P
7439-92-1	Lead	500 55.3	J U	D N J	P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	240	J	D N J	P
7440-22-4	Silver	500 10.0	U	D N J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0030

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-03

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	D ~~N~~ J	P
7440-39-3	Barium	10,000 ~~15.7~~	~~J~~ U	D	P
7440-43-9	Cadmium	250 ~~5.0~~	U	D	P
7440-47-3	Chromium	500 ~~10.0~~	U	D	P
7439-92-1	Lead	500 ~~10.0~~	U	D ~~N~~ J	P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	319	~~J~~	D N J	P
7440-22-4	Silver	500 ~~10.0~~	U	D ~~N~~ J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0034

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-04

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	~~D N~~ J	P
7440-39-3	Barium	10,000 ~~328~~	~~J~~ U	~~D~~	P
7440-43-9	Cadmium	~~4.8~~	~~J~~	~~D~~	P
7440-47-3	Chromium	500 ~~45.9~~	~~J~~ U	~~D~~	P
7439-92-1	Lead	500 ~~10.0~~	U	~~D N~~ J	P
7439-97-6	Mercury	0.20 ~~0.13~~	~~J~~ U		CV
7782-49-2	Selenium	1750 ~~35.0~~	U	~~D N~~ J	P
7440-22-4	Silver	500 ~~10.0~~	U	~~D N~~ J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0035

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-05

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	~~D N~~ J	P
7440-39-3	Barium	10,000 ~~308~~	~~J~~ U	D	P
7440-43-9	Cadmium	4.8	J	D	P
7440-47-3	Chromium	500 ~~12.5~~	~~J~~ U	D	P
7439-92-1	Lead	500 ~~10.0~~	U	~~D N~~ J	P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	1750 ~~35.0~~	U	~~D N~~ J	P
7440-22-4	Silver	500 ~~10.0~~	U	~~D N~~ J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0037

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-06

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	~~D N~~ J	P
7440-39-3	Barium	10,000 964	~~J~~ U	~~D~~	P
7440-43-9	Cadmium	250 ~~5.0~~	U	~~D~~	P
7440-47-3	Chromium	500 ~~10.0~~	U	~~D~~	P
7439-92-1	Lead	500 ~~10.0~~	U	~~D N~~ J	P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	188	~~J~~	~~D N~~ J	P
7440-22-4	Silver	500 ~~10.0~~	U	~~D N~~ J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0040

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-07

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	~~500~~ 10.0	U	~~D N J~~	P
7440-39-3	Barium	~~10,000~~ 51.1	~~J~~ U	~~D~~	P
7440-43-9	Cadmium	~~250~~ 5.0	U	~~D~~	P
7440-47-3	Chromium	~~500~~ 101	~~J~~ U	~~D~~	P
7439-92-1	Lead	~~500~~ 192	~~J~~ U	~~D N J~~	P
7439-97-6	Mercury *	~~20~~ 0.20	U	~~D~~	CV
7782-49-2	Selenium	~~1750~~ 35.0	U	~~D N J~~	P
7440-22-4	Silver	~~500~~ 10.0	U	~~D N J~~	P

* Hg ran at 100X dilution

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0041

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-08

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	~~D N~~ J	P
7440-39-3	Barium	10,000 ~~1090~~	~~J~~ U	~~D~~	P
7440-43-9	Cadmium	250 ~~5.0~~	U	~~D~~	P
7440-47-3	Chromium	500 ~~10.0~~	U	~~D~~	P
7439-92-1	Lead	5910		~~D N~~	P
7439-97-6	Mercury	1.6			CV
7782-49-2	Selenium	1750 ~~35.0~~	U	~~D N~~ J	P
7440-22-4	Silver	500 ~~10.0~~	U	~~D N~~ J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0044

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-10

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	~~D N~~ J	P
7440-39-3	Barium	10,000 ~~46.5~~	~~J~~ U	~~D~~	P
7440-43-9	Cadmium	250 ~~5.0~~	U	~~D~~	P
7440-47-3	Chromium	500 ~~10.0~~	U	~~D~~	P
7439-92-1	Lead	500 ~~159~~	~~J~~ U	~~D N~~ J	P
7439-97-6	Mercury	0.20	U		CV
7782-49-2	Selenium	1750 ~~35.0~~	U	~~D N~~ J	P
7440-22-4	Silver	500 ~~10.0~~	U	~~D N~~ J	P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB0045

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: 1705.0 SDG No.: MB0025

Matrix: (Soil/Water) WATER Lab Sample ID: 1006286-11

Level: (low/med) LOW Date Received: 06/18/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	500 ~~10.0~~	U	~~D N~~ J	P
7440-39-3	Barium	10,000 ~~15.6~~	~~J~~ U	D	P
7440-43-9	Cadmium	250 ~~5.0~~	U	D	P
7440-47-3	Chromium	500 ~~16.3~~	~~J~~ U	D	P
7439-92-1	Lead	500 ~~81.6~~	~~J~~ U	~~D N~~ J	P
7439-97-6	Mercury *	20 ~~0.20~~	U	D	CV
7782-49-2	Selenium	1750 ~~35.0~~	U	~~D N~~ J	P
7440-22-4	Silver	500 ~~10.0~~	U	~~D N~~ J	P

* Hg run at 100X dilution

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: BROWN Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB40T6

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: SDG No.: MB40T6

Matrix: (Soil/Water) WATER Lab Sample ID: 1006298-02

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	82.4	J		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	2.7	J		P
7440-39-3	Barium	300		* J	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0 ~~1.0~~	~~J~~ U		P
7440-70-2	Calcium	37400			P
7440-47-3	Chromium	5.5	J		P
7440-48-4	Cobalt	4.0	J		P
7440-50-8	Copper	~~23.7~~	~~J~~	R ~~*~~ ~~N~~ J	P
7439-89-6	Iron	93.5	J		P
7439-92-1	Lead	7.7	~~J~~	~~N~~ J	P
7439-95-4	Magnesium	739	J		P
7439-96-5	Manganese	24.0			P
7439-97-6	Mercury *	0.40 ~~0.20~~	U	~~P~~	CV
7440-02-0	Nickel	6.4	J		P
7440-09-7	Potassium	58300			P
7782-49-2	Selenium	5.5	J		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	31200			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	15.6	J		P
7440-66-6	Zinc	22200		~~*~~ J	P
57-12-5	Cyanide	44.2		~~N~~ J	AS

* mean of 2X dilution

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MB40T7

Lab Name: Bonner Analytical Testing Contract: EPW08064

Lab Code: BONNER Case No.: 40200 NRAS No.: SDG No.: MB40T6

Matrix: (Soil/Water) WATER Lab Sample ID: 1006298-01

Level: (low/med) LOW Date Received: 06/12/2010

% Solids 0.0

Concentration Units (**ug/L** or **mg/kg** dry weight): ug/L

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	3.6	J		P
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	457		* J	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0 ~~0.39~~	~~J~~ U		P
7440-70-2	Calcium	25000			P
7440-47-3	Chromium	10.0	U		P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	132		~~*~~ ~~N~~ J	P
7439-89-6	Iron	70.0	J		P
7439-92-1	Lead	12.3		~~N~~ J	P
7439-95-4	Magnesium	4320	J		P
7439-96-5	Manganese	59.0			P
7439-97-6	Mercury	0.20 ~~0.089~~	~~J~~ U		CV
7440-02-0	Nickel	1.2	J		P
7440-09-7	Potassium	1080	J		P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	15200			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	50.0	U		P
7440-66-6	Zinc	4790		~~*~~ J	P
57-12-5	Cyanide	10 ~~8.4~~	~~J~~ U	~~N~~ J	AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: